

KARNIK, V.; MAREK V.

Hodographs of quarry blasts. p. 41

Vol. 65, No. 1/11, 1953 (Pub. 1954)
GEOFYSIKALNI SEORNIK
Praha, Czechoslovakia

So: Eastern European Accession Vol. 5, No. 4, 1956

KARNIK, V.; MOLNAR, A.

New macroseismic study of the Nograd earthquake, February 20, 1951. p. 66.
(GEOFYZIKALNI SBORNIK, No. 20/35, 1955 (published 1956), Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (MEAL) LC, Vol. 6, No. 12, Dec 1957. Uncl.

KARNEK, V.; VANSE, J.

The third meeting of the European Seismologic Commission in Vienna. p. 604.
(CESKOSLOVENSKY CASOPIS PRO FYSIKU, Vol. 6, No. 5, Sept 1956, Praha,
Czechoslovakia)

SO: Monthly List of East European Accessions (MEAL) LS, Vol. 6, No. 12, Dec 1957. Uncl.

KARNIK V.

Graphic determination of the distance and the azimuth of an epicenter.
In German. p. 45. (GEOPHYSIKALNI SBORNIK, No. 20/35, 1955 (published 1956),
Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 12, Dec 1957.

KARNIK, V.

Determination of the magnitude of the earthquakes in Europe located close by.
In German.

P. 399, (Geofysikalni Sbornik) Ceased publication. No. 36/60, 1956 (Published 1957)
Praha, Czechoslovakia

SO:Monthly Index of East European Accessions (EEAI) Vol. 6, No. 11 November 1957

KARNEK, V.

Determination of the magnitude of earthquakes occurring nearby. In German.

p 88 (Studia Geophysica Et Geodaetica) Vol 1 no 1 1957. Praha, Czechoslovakia.

SO: Monthly Index of East European Accessions (EMEA) LC, Vol 7 no 1 Jan 1958

KARNEK, V.

On the investigation of tectonic microtremors in the Komarno basin. In English.

p. 95 (Studia Geophysica Et Geodaetica) Vol 1 no 1 1957. Praha, Czechoslovakia.

30: Monthly Index of East European Accessions (MEEA) EC, Vol 7, no 1 Jan 1958

KARNIK, V.; TOBIASH, V. [Tobias, V.]; VANEK, I.

Experimental investigation of seismicity in Komarno Province.
Biul. Sov. po seism. no.6:48-51 '57. (MIRA 11:3)

1. Geofizicheskiy institut Chekhslovatskoy Akademii nauk, Praga.
(Komarno, Czechoslovakia--Earthquakes)

KARNIK, V.

A meeting of the subcommittee for Alpine explosions of the European Seismologic Commission.

p. 466 (Ceskoslovenska horoflorie. Vol. 7, no. 4, 1957 Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 2,
February 1958

KARNIK, V.I.

3(4,6,10)

PHASE I BOOK RE-EVALUATION

Czech/227

1: 2/28/76

Czechoslovakia Academy of Sciences, Geophysical Institute

Geophysical Journal 1971. Scientifically Journal, Prague geophysical journal. (Geophysical Symposium, 1971) Praha, 1971. 631 p. (Series: Iss: Trudy, No. 61-71) 700 copies printed.

Scientific Ed.: Alois Zatepek, Corresponding Member, Czechoslovak Academy of Sciences, Doctor of Physical and Mathematical Sciences, Professor, and Member of the State Prize; Petr, Ed.: Marie Polajsi, Editorial Board: Jiri Vach, Doctor, Jan Pichl, Doctor, Jiroslav Jurek, Doctor, and Jiri Vach, Doctor.

PHASE I: The collection is intended for geophysicists, meteorologists, climatologists.

CONTENTS: The collected works in geophysics for 1971 contains 11 reports of the Geophysical Institute of the Czechoslovak Academy of Sciences (Nos. 61 - 71). The articles are on problems in geophysics and meteorology and are written in either Czech, German, or Russian, with remarks in the two alternate Card 1/3

languages. The first work discusses numerical and graphical methods of forecasting baric and thermobaric fields; the second, long-range climatic changes, particularly in the European Atlantic area; the third provides gravimetric data and describes the preparation, organization of gravimetric operations and methods of processing data obtained; the fourth presents the results of a barometric analysis of data collected by Kozlovskii in the period 1953-55 at a gravity station in Krasnoyarsk; the fifth is a study of the propagation of seismic waves in the earth's crust; the sixth is a study of the propagation of seismic waves in the earth's crust; the seventh is a study of the propagation of seismic waves in the earth's crust; the eighth is a study of the propagation of seismic waves in the earth's crust; the ninth is a study of the propagation of seismic waves in the earth's crust; the tenth is a study of the propagation of seismic waves in the earth's crust; the eleventh is a study of the propagation of seismic waves in the earth's crust.

TABLE OF CONTENTS:

- No. 65. Jarnovek, Jaroslav, Doctor Vilada Kovarova, Institute of Seismology, Investigations by the Barometric Wave Method in the Slavetia Sobota Area (In German, with remarks in Czech and Russian) 367
- No. 67. Dvorak, Arnost, Ruzicka, Doctor. Changes to Structures in the Vicinity of Slavetia Chamber (In German, with remarks in Czech and Russian) 381
- No. 68. Dvorak, Jaroslav, Ruzicka, Doctor. Changes to Structures in the Vicinity of Slavetia Chamber (In German, with remarks in Czech and Russian) 399
- No. 69. Karnik, V.I., Kadner, Doctor. Changes to Structures in the Vicinity of Slavetia Chamber (In German, with remarks in Czech and Russian) 411
- No. 70. Zatepek, Professor Doctor Alois. A Seismic Map of Czechoslovakia (In German, with remarks in Czech and Russian) 399
- No. 71. Dvorak, Jaroslav, Ruzicka, Doctor, Professor Doctor Alois Zatepek. On the Problem of Barometric Changes to Structures Caused by Earthquakes in Czechoslovakia (In Czech, with remarks in Russian and German) 619

AVAILABILITY: Library of Congress

KARNIK, Vit.

Geophysics and seismology in Sweden. Vestnik CSAV 68 no. 5:650-654
'59.

Z/023/60/004/002/009/009

AUTHOR: Kárník, Vít

TITLE: Emanuel Michal, Doctor of Natural Sciences, is 65 Years Old

PERIODICAL: Studia Geophysica et Geodaetica, 1960, Vol. 4, No. 2, p. 199

TEXT: The author reviews the life of a prominent Czechoslovak seismologist, E. Michal, Doctor of Natural Sciences, and evaluates his scientific work on the occasion of the scientist's 65th birthday.



Card 1/1

Z/023/61/000/002/003/007
A207/A126

AUTHOR: Karnik, Vit
TITLE: Epicenter maps for Europe ($I_0 \geq VI$, 1901-1955)
PERIODICAL: Studia Geophysica et Geodaetica, no. 2, 1961, 133-137

TEXT. The European Seismological Commission, established in Brussels in 1951, conducted a detailed study of the seismicity of the European area, with special emphasis on the stimulation and coordination of this study. Some of the problems which remained unsolved by other authors are mentioned as being the unification and completion of existing material and the classification of data. The purpose of this paper is to present the first epicenter maps to all who are interested, and to discuss some of the problems of mapping the seismic activity of the European area. It is emphasized that the maps submitted with this article are only preliminary drafts. The commission compiled a catalogue of seismic activity for the period of 1901-1955 for $I_0 \geq VI$. National catalogues of the main data, compiled for the same purpose in various countries, were used as the basis. The collected data were used both for the plotting of maps
Card 1/3

Z/023/61/000/002/003/007
A207/A126

Epicenter maps for ...

of the foci of small earthquakes with maximum intensities of $I_0 = VI$, $I_0 = VII$, $I_0 = VIII$ and $I_0 = IX-XII$, as well as for maps of earthquake foci with depths of $h > 60$ km. The maps were plotted primarily for use in discussions of methods. The requirements for the preparation of epicenter maps are the following: a) the scale of the maps must allow the visual separation of signs, b) the data must be divided into classes within $VI \leq I_0 \leq XII$, c) the data must be differentiated according to their quality or to the source (macro- or microseismic), d) one must choose suitable symbols or signs for epicenters, etc. Certain conclusions are drawn from these preliminary maps: all the maps show the highest seismic activity in the area of the Aegean Sea and the southern part of the Balkan peninsula. Then follow the remaining parts of the Balkans, Italy, Turkey and the Caucasus. The part of Europe north of the 48th parallel is characterized by a very low seismicity, some zones being practically aseismic. For determining the frequency of shocks, the method proposed by J.V. Riznichenko (Ref. 6 Ob izuchenii seysmicheskogo rezhima (On the study of seismological laws), Izv. AN SSSR, ser. geofiz. No. 9) is recommended. There are 5 maps and 10 references: 8 Soviet-bloc and 2 non-Soviet-bloc. The references to the 4 most recent English-language publications read as follows:

Card 2/3

9.98653.9300

25465

Z/023/61/000/003/003/005
D006/D102

AUTHORS: Kárník, Vít, and Tobyáš, Vladimír

TITLE: Underground measurements of the seismic noise level

PERIODICAL: Studia geophysica et geodaetica, no. 3. 1961, 231-236, 286a

TEXT: During 1959-1960, several informatory measurements were made at six abandoned mine galleries in Bohemia (Nový Knín, Jáchymov, Mořina, Újezdec, Náchod, and Kašperské Hořy) to investigate the seismic noise level with emphasis on the period range of $T=0.1 - 1.0$ sec. Measurements of seismic noise in a Příbram mine still in operation and at the Průhonice seismic station were used for reference. At all locations, the seismic noise was recorded by short-period electrodynamic seismographs with different constant combinations. It was found that the most marked disturbing vibrations occurred in the frequency range of $T = 0.1 - 0.5$ sec; the amplitude of the noise level with $T \leq 0.3$ sec in the abandoned galleries did not exceed $1-2 \text{ m}\mu$; and the amplitude of the noise level with $T = 0.5$ sec

Card 1/4

J

25465

Z/023/61/000/003/003/005
D006/D102

Underground measurements ...

ranged from 1-2 $m\mu$ to 12-15 $m\mu$ depending on the distance from industrial centers. The measurements indicated that the Kašperské Hory and Újezdec mines were the quietest ones of all the above locations. Therefore, more detailed measurements were made at the Kašperské Hory mine using seismographs with a greater sensitivity for periods $T > 1$ sec. Consequently, microseisms with $T=2-7$ sec were also recorded. The source of microseisms with $T=2-3$ sec is assumed to be either industrial activity together with local ground conditions, as believed by A. Zátpek (Ref. 2: Sur les microséisms de Praha au cours de l'Année Géophysique Internationale [On Microseisms in Prague during the International Geophysical Year], *Studia geoph. et geod.*, 1960, 3, 233), or the movement of air masses towards the coastal shelf, as based on the theory proposed by B. Gutenberg (Ref. 1: Two types of microseisms, *Contr. No. 881, Div. of Geol. Sc., Calif. Inst. Techn.*, 1959, 595). However, the latter assumption contradicts Gutenberg's theory which states that such noises should not be observed beyond a distance of 100 km from the coast. The results of these measurements are in agreement with results obtained by A. G. Moskvina and N. V.

Card 2/4

25465

Z/023/61/000/003/003/005

D006/D102

Underground measurements ...

Shebalin (Ref. 4: Chastotnye kharakteristiki seysmografov stantsii "Pulkovo" [Frequency characteristics of the "Pulkovo" Station seismographs], Izv. AN SSSR, Ser. geof., no. 11, 1958, 1389), and K. K. Zapol'skiy (Ref. 7: Izmerenie urovnya i spektr sostava korotkoperiodnykh mikroseyism [Measurement of the level and composition spectrum of short-period microseisms], Trudy IFZ AN SSSR, No. 10, 177; Voprosy inzhenernoy seysmologii, no. 3, 1960, 153) in that these authors also found two maxima and a weak noise with $T = 1$ sec. On the other hand, curves of J. N. Burne and J. Oliver (Ref. 5: The seismic noise of the Earth's surface, Bull. Seism. Am., 49, 1959, 4, 349) show only one maximum at $T = 6-7$ sec. Although not complete, the results provide first information on the character and level of noise with periods $T = 0.1 - 2$ sec. The measurements have shown that noise with very short periods ($T = 0.1 - 0.2$ sec) has an amplitude $A < 1-2$ m, and that noise with $T \approx 0.5$ sec is predominant in the short-period range and its intensity depends primarily on the distance from towns. Noise with a period $T = 1$ was found very rarely (with the magnification used), but microseisms with a period of $T = 2$ or larger were regularly observed. The above results permit the selection of a

Card 3/4

25465

Underground measurements ...

Z/023/61/000/003/003/005
D006/D102

suitable site for experiments with sensitive seismographs with proper response characteristics. There are 3 figures, 2 tables and 7 references: 3 Soviet-bloc, 3 non-Soviet-bloc, and 1 unidentified. The two references to English-language publications read as follows: B. Gutenberg, Two types of microseisms, Contr. No. 381, Div. of Geol. Sc., Calif. Inst. Techn. (1959), 595; and J. N. Burne, J. Oliver, The seismic noise of the Earth's surface, Bull. Seism. Soc. Am., 49 (1959), 4, 349. (Technical Editor: A. Zátpek).

ASSOCIATION: Geophysical Institute, Czechosl. Acad. Sci., Prague.

SUBMITTED: November 18, 1960

Card 4/4

Z/023/52/000/001/002/004
D006/D102

AUTHORS: Kárník, V., Kondorskaya, N. V., Riznichenko, Yu.V., Savarensky, E.F.,
Solovyev, S.L., Shebalin, N. V., Vaněk, J., and Zátonek, A.

TITLE: Standardization of the earthquake magnitude scale

PERIODICAL: Studia geophysica et geodaetica, no. 1, 1962, 41-47

TEXT: The paper presents a proposal for standard methods of magnitude determination of both shallow and deep earthquakes, and describes the practical application of the suggested magnitude scale as agreed upon by Soviet and Czechoslovak seismologists at meetings held in Prague on December 7-14, 1960 and in early 1961. The proposal is based on the following postulates: (1) General acceptance of a unified formula for the definition of the earthquake magnitude M

$$M = \log (A/T)_{\max} + \sigma(\Delta) \quad (1)$$

where A is the maximum ground amplitude of the wave considered (in microns), T is the corresponding period in seconds, and $\sigma(\Delta)$ is the calibrating function expressing the relation between A/T and the epicentral distance Δ , which is

Card 1/3

Standardization of the

Z/023/62/000/001/002/004
D006/D102

different for different wave types; (2) General application of standard calibrating functions $\sigma(\Delta)$ for body and surface waves as calculated according to the methods recommended by the proponents; (3) Determination of a representative M for each earthquake, to be represented by a simple arithmetic mean of magnitudes of a single wave type as established according to the proposed standard method at many stations. The determination should be done by a proposed international center. As of January 1, 1962, the magnitude M will be determined according to the proposed standard method at all Czechoslovak and Soviet seismological stations. J. Vaněk and J. Stelzner are the personalities mentioned. There are 2 tables and 20 references: 8 Soviet-bloc and 12 non-Soviet-bloc. The references to the four most recent English-language publications read as follows: J. Vaněk, J. Stelzner, The problem of magnitude calibrating functions for body waves, *Annali di Geofisica*, 13, 1960, 39; E. Bisztricsány, On the determination of earthquake magnitudes, *Annales Univers. Sci., Budapest, Sect. Geolog.*, 2, 1959, 39; T. Nagamine, A. Seki, Determination of earthquake magnitude from surface waves for Matsushiro seismological observatory and the relation between magnitude and energy, *Geophys. Mag.*, 28, (1958), 303; Z. Droste, S. Gibowicz, Determination of the magnitude of distant earthquakes at the Silesian geophysical station in Raciborz, *Acta geophys. polon.*,

Card 2/3

Standardization of the

Z/023/62/000/001/002/004
D006/D102

6, (1958), 222. (Technical editor: L. Ruprechtová)

ASSOCIATION: Geophysical Institute, Czechoslovak Academy of Sciences, Prague
(V. Kárník, J. Vaněk); Institute of the Physics of the Earth, Academy
of Sciences of the USSR, Moscow (N.V. Kondorskaya, Yu. V. Riznichenko,
E. F. Savarensky, S. L. Solovyev, N. V. Shebalin); Institute of Geo-
physics, Charles University, Prague (A. Zátpek)

SUBMITTED: November 11, 1961

Card 3/3

S/049/62/000/002/001/005
D218/D301

AUTHORS:

Vaněk, J., Zátocek, A., Kárník, V., Kondorskaya, N.V.,
Rizničenko, Yu.V., Savarenkiy, Ye.P., Solov'yev,
S.L. and Shebalin, N.V.

TITLE:

Standardization of the magnitude scale

PERIODICAL:

Akademiya nauk SSSR. Izvestiya. Seriya geofiziches-
kaya, no. 2, 1962, 153-158

TEXT:

It is pointed out that various magnitude scales are used at the present time and that their main disadvantage is that they provide different magnitudes for a given earthquake. This is because in many cases the methods used to calculate the magnitude are not clearly defined and are inadequately described. A special conference of Soviet and Czechoslovak seismologists was convened in Prague on December 7-14, 1960, to deal with this problem. The aim of the present paper is to give an account of the main results of the Prague meeting and to suggest a standard method for determining

Card 1/4

Standardization of the magnitude scale

S/049/62/000/002/001/005
D218/D301

the earthquake magnitude. It is suggested that the scale should be based on the following standard formula:

$$M = \lg \left(\frac{A}{T} \right)_{\max} + \sigma(\Delta)$$

where A is the maximum displacement amplitude, T is the corresponding period in seconds and $\sigma(\Delta)$ is a calibrating function which describes the variation of A/T with epicentric distance and is different for different types of waves. This formula has been discussed by B. Gutenberg and C.F. Richter, and by the first three of the present authors in an earlier work. The calibration function is taken as an average of the Q function of Gutenberg and Richter and the β function of J. Vaněk and J. Stelzner. A table is reproduced giving the smoothed average calibrating functions for Pn, PnV, PnH, and Sii waves. In the case of surface waves, the calibrating function is taken to be of the form $\sigma(\Delta) = a \lg \Delta + b$. It was found that the coefficients a and b for Lii waves are on average equal to 1.66 and 5.3 respectively. This result holds for surface waves at epi-

Card 2/4

Standardization of the magnitude scale S/049/62/000/002/001/005
D218/D301

centric distances between 2 and 160°. Below 5°, Sg and L waves must be carefully distinguished. It is pointed out that the problem of defining a single value for k is not yet solved because different average values are obtained for k with different types of waves (M_LH , M_PH , M_SH , and so on). Nevertheless, it was decided not to combine these values as on the unified Gutenberg-Richter scale, but to use the method described above to accumulate a large amount of data and return to the problem of defining an average magnitude later. Beginning with 1962, all stations of Czechoslovakia and the USSR will use the method described in the present paper. There are 2 tables and 20 references: 11 Soviet-bloc and 9 non-Soviet-bloc. The 4 most recent references to the English-language publications read as follows: B. Gutenberg and C.F. Richter, Ann. Geophys., 9, (1956); Report of the committee on magnitudes 12th General Assembly of the IUGG, Helsinki (1960); J. Vaněk and J. Stelzner, Ann. Geophys., 15 (1960); T. Nagamune and A Seki, Geophys. Mag., 28 (1958).

Card 5/4

Standardization of the magnitude scale S/049/62/000/002/001/005
D213/D501

ASSOCIATION: Geofizicheskiy institut Akademii nauk Ch SSR (Geo-
physics Institute of the Academy of Sciences, ✓
Czechoslovak SSR), Geofizicheskiy institut Karlova ✓
Universiteta, Praga (Geophysics Institute, Charles
University, Prague) and Akademiya nauk SSR, Institut
fiziki zemli (Academy of Sciences USSR, Institute of
Physics of the Earth)

SUBMITTED: October 31, 1961

Card 4/4

KARNIK, V.; KONDORSKAYA, N.V.; RIZNITCHENKO, Ju. V.; SAVARENSKY, E.F.;
SOLOVIEV, S.L.; SHEBALIN, I.V.; VANEK, J.; ZATOPEK, A.

Standardization of the magnitude scale of earthquakes. Studia
geophys 6 no.1:41-48 '62.

1. Geophysical Institute, Czechoslovak Academy of Sciences,
Praha 4, Bocni II (for Karnik, Vanek). 2. Institute of Physics
of the Earth, Academy of Sciences of USSR, Moskva G-242, B.
Gruzinskaja 10 (for Kondorskaya, Riznitchenko, Savarensky, Soloviev,
Shebalin). 3. Institute of Geophysics, Charles University, Praha 2,
Ke Karlovu 3 (for Zatopek).

VANEK, I.; ZATOPEK, A.; KARNIK, V.; KONDORSKAYA, N.V.; RIZNICHEKO, Yu.V.;
SAVARENSKIY, Ye.F.; SOLOV'YEV, S.L.; SHEBALIN, H.V.

Calibration of the magnitude scale. Izv. AN SSSR. Ser. geofiz.
no.2:153-158 F '62. (MIRA 15:2)

1. Geofizicheskiy institut Akademii nauk Chekhoslovatskoy
Sotsialisticheskoy Respubliki, Geofizicheskiy institut Karlova
Universiteta, Praga, i Institut fiziki Zemli AN SSSR.
(Earthquakes)

KARNIK, Vit

Amplitude distance curves of surface waves at short epicentral distances ($\Delta < 2000$ km). Studia geophys 6 no.4:340-346 '62.

1. Geophysical Institute, Czechoslovak Academy of Sciences, Praha 4 - Šporilov, Bocni II.

KARNIK, Vit

Developing ~~the~~ seismologic and seismic engineering research.
Vestnik CSAV 71 no.5:577-580 '62.

KARNIK, Vit; TOBYAS, Vladimir

Experimental seismic station in Kasperske Hory area. Studia
geophys 7 no.1:88-89 '63.

ZOUBEK, Vladimir, akademik; KARNIK, V.; KASPAR, J.; MASKA, M.;
VACHTL, J.; ZATOPEK, A.

Research on the deep earth layers and its place in the research
on inorganic nature. Vestnik CSAV 72 no.3:327-332 '63.

L 22598-65 EWT(1)/EWA(h) Feb GW
ACCESSION NR: AT500348

Z/2512/63/011/000/0143/0187

AUTHOR: Kurnik, V.; Ruprechtova, L.

TITLE: Sensisity of Carpatian region

SOURCE: Ceskoslovenska akademie ved. Geofysikalni ustav. Geofysikalni sbornik, v. 11, 1964. Prague, 1964, 143-187

TOPIC TAGS: earthquake catalogue, hypocenter map, frequency, energy release

ABSTRACT: Earthquake catalogues were compiled for the Carpatian region for the periods 1500-1800 (I₀ VIII) 1801-1900 (I₀ VII) and 1901-1955 (I₀ VI). Based on those catalogues hypocenter maps and a map of maximum magnitudes of observations were plotted. The relation between M, J₀, and h, the effect of the hypocenter depth on the M value, the relation between the frequency and M, and the release of energy of minor earthquakes and bathyseisms were also under study.

ASSOCIATION: none

Card 1/2

L 22598-65

ACCESSION NR: AT5001848

SUBMITTED: 02 May 63

ENCL: 00

SUB CODE: ES

NO REF SOV: 013

OTHER: 050

Card 2/2

L 34684-66 (11) GW

ACC NR: AF6025857

SOURCE CODE: CZ/0023/65/009/003/0236/0249

AUTHOR: Karnik, Vit

28
B

ORG: Geophysical Institute, CSAV, Prague

TITLE: Magnitude-intensity relations for European and Mediterranean seismic regions

SOURCE: Studia geophysica et geodaetica, v. 9, no. 3, 1965, 236-249

12

TOPIC TAGS: seismology, seismic wave, earthquake, mapping

ABSTRACT: The article presents a procedure for relating the magnitude M in the classification of earthquakes to the same calibrating curves either for the determination of M amplitudes of surface waves or when macroseismic intensities I_0 are used. The magnitude-intensity relations presented allow the historical macroseismic data for Europe to be unified and statistical investigation and mapping to be carried out. Orig. art. has: 6 figures, 12 formulas and 2 tables. [Orig. art. in Eng.] [JPRS: 32,859]

SUB CODE: 08 / SUEM DATE: 21Aug64 / ORIG REF: 007 / SOV REF: 004

OTH REF: 011

Card 1/1 UKR

0916 0988

3583

Z/054/62/000/005/006/007

E073/E335

26 7/10

AUTHOR: Hárníková, Eva, Engineer

TITLE: Compatibility of constructional materials for fuel cells. Part II.

PERIODICAL: Hutnické listy, no. 5, 1962, 369

TEXT: This is a continuation of work carried out in 1960 (Report SVÚOM 59/1960). The diffusion was studied in the system U-Be and U-Ti. Diffusion was proved in the system U-Be only at a temperature of 550 °C; the measured maximum thickness of the diffusion layer after 24 days was 40 μ, which corresponded to a penetration coefficient of 7.7×10^{-11} cm²/sec. The activation energy of the system U-Be: $Q = 16\ 900$ cal/g.at. In studying the system U-Zr the conditions were determined which were required for forming the diffusion contact comprising the initial state of the surface of both metals, the required initial pressure and annealing temperature during diffusion. It was proved that the best diffusion contact would be obtained in the case of U if electrolytic surface treatment were applied, X
Card 1/2

Compatibility of

Z/054/62/000/005/006/007
E075/E335

whilst in the case of Zr - if chemical polishing were applied. The suitability of the surface treatment for the formation of a satisfactory diffusion contact was verified by thermal oxidation. An oxide layer a few hundred Å thick considerably lowers the possibility of a diffusion contact between the two metals.

Research Report SVUOM 38/61. 32 pages, 3 figures, 8 tables.
[Abstracter's note: this is a complete translation.]

Card 2/2

X

L 20591-66 EPF(n)-2/EWP(t) IJP(c) ES/JD/WW/JG
ACC NR: AP6012007 SOURCE CODE: CZ/0038/65/000/011/0411/0415

AUTHOR: Karnikova, Eva; Vanicek, Oldrich--Vanichek, O. 71/13

ORG: State Research Institute on Conservation of Materials, Prague (Statni ustav ochrany materialu)

TITLE: Investigation of uranium and zirconium compatibility by means of a micro-analyser with electron probe 17

SOURCE: Jaderna energie, no. 11, 1965, 411-415

TOPIC TAGS: uranium, zirconium, metal diffusion, heat of activation, activation energy

ABSTRACT: Quantitative investigations were made of uranium and zirconium diffusion. The principle of measurement and evaluation using Casting's microanalyzer is discussed. The diffusion coefficient, activation energy, and activation heat of the process in the temperature range from 500 to 900°C were calculated. The paper was presented by Vl. Kraus. Orig. art. has: 9 figures and 1 table. [NA]

SUB CODE: 20 / SUBM DATE: none / ORIG REF: 005 / OTH REF: 012

Card 1/1 BK

UDC: 621.039.548.533: 669.29.017: 548.526 2

Z/038/63/000/004/001/005
D406/D301

AUTHORS: Holinka, Miroslav, Masařík, Vladimír and Kárníková, Eva

TITLE: A contribution to the compatibility of the uranium-titanium system

PERIODICAL: Jaderná energie, no. 4, 1963, 109-113

TEXT: The article, exclusively based on Western sources, describes and evaluates qualitative metallographic studies of uranium-titanium diffusion, with special respect to the formation and behavior of the U₂Ti phase. The compatibility of the U-Ti system was studied by the French scientists Y. Adda and J. Philibert, and by R.W. Buzzard and other US scientists. It was found that the formation of the U₂Ti phase is characteristic for the first stage of diffusion annealing at 600, 700 and 800°C, when surface reactions occur on the U - Ti boundary. At higher temperatures, where the uranium solubility in titanium increases, a solid gamma solution is formed, while U-diffusion on α -T-grain boundaries prevails at lower temperatures

Card 1/2

A contribution to the compatibility ... Z/038/63/000/004/001/005
D406/D301

These experimental results are important for the development of fuel elements, since (a) the formation of the U_2Ti phase on the boundary of the two metals can considerably improve the mechanical properties of the metal junction; (b) the possibility of rapid, even ally inhomogeneous, uranium diffusion into the cladding, or the basic material respectively, may cause a direct contact between the uranium and the heat-exchange medium. There are 10 figures and 1 table. (Technical Editor Vl. Kraus).

ASSOCIATION: Státní výzkumný ústav ochrany materiálu G.V. Akimova
(State Research Institute for Material Protection
im. G.V. Akimov)

Card 2/2

KARNIKOVA, Eva; HOLINKA, Miroslav; MASARIK, Vladimir

Compatibility of uranium and beryllium. Jaderna energie 9
no.9:277-280 9'63.

1. Statni vyzkumny ustav ochrany materialu G.V.Akimova, Praha.

ANTALOVSKA, Z.; LONSKA, V.; technika upoluprace KARNIKOVA, Iva

Penetration of tetracycline antibiotics into the saliva under physiological conditions. Cas lek. cesk. 102 no.15:390-394 12 Ap '63.

1. Stomatologicka klinika lekarske fakulty KU v Hradci Kralove, prednosta prof. dr. L. Sazama Ustredni mikrobiologicka laborator KUNZ v Hradci Kralove.

(SALIVA) (TETRACYCLINE) (OXYTETRACYCLINE)
(CHLORTETRACYCLINE) (PAROTID GLANDS) (LIVER) (MUSCLE)
(TABLETS) (INJECTIONS, INTRAVENOUS)

TUMANOV, I.I.; KUZINA, G.V.; KARNIKOVA, L.D.

Raising plants on gravel for research purposes. Fiziol.rast.
7 no.3:320-325 '60. (MIRA 13:6)

I. K.A. Timiryazev Institute of Plant Physiology, U.S.S.R.
Academy of Sciences, Moscow.
(Plants--Soilless culture)

TUMANOV, I.I.; KUZINA, G.V.; KARNIKOVA, L.D.

Effect of photoperiods on the frost resistance of apricots and
black currants. Fiziol.rast. 12 no.4:665-682 J1-Ag '65.

(MIRA 18:12)

1. Institut fiziologii rasteniy imeni K.A.Timiryazeva AN SSSR,
Moskva. Submitted July 15, 1964.

KARNIKOWSKI, P., and others

"Petroleum and Natural Gas." p.36
(PRZEGLAD GEOLOGICZNY No. 1/2, Jan./Feb. 1954 Warszawa, Poland)

SO: Monthly List of East European Accessions, LC, Vol. 3, no. 5, May 1954, Uncl.

Card 1/1

CIA-RDP86-00513R000720810015-

KARNIKOWSKI, M.

RUMINIA/General Problems of Pathology - Tumors. Human Tumors. U.

Abs Jour : Ref Zhur - Biol., No 2, 1959, 8889

Author : Nestase, G., Sperantse, G., Karniol, M., Lazer, M.,
Kagane G., Merkalescu, D.

Inst : -

Title : Research on Certain Serum Anti-Hyaluronidases in Skin
Cancer.

Orig. Pub : Rumynsk. med. obozreniye, 1957, 1, No 2, 81-86

Abstract : No abstract.

Card 1/1

KARNIS, J.

"Principles of soil science and soil geography" by I.P.Gerasimov,
M.A.Glazovskaja [Glazovskaya, M.A.]. Reviewed by J.Karnis. Geogr
sas SAV 15 no.3:232-234 '63.

KHMOISH-USEKITE, G.P.; DIRMONTSEY, V.N.

Study of the reaction of alrezia with 1,2,3-dinitrobenzene and
its use for the determination of dimethyl. (pt. 3) No. 6042-
16. No. 165. (MIRA 1955)

1. Iyadgenekly farmatsiyneskyy laborat. Substant
November 28, 1952.

38124. KARSHTSEAYA, E., KHOLOKOVA, A., AND DAVIDOV, R.

Izmeneniye nezrelogo svara pri zarozhivanii. Moloch. prom-st',
1949, No. 12, s. 38-40

KARNITSKAYA, MARIYA SERGEEVNA

N/5
747.6
.KI
1955

RUKOVODSTVO K PRAKTICHESKIM ZANAYATIYAM PO MOLOCHNOMU DELU [MANUAL FOR PRACTICAL
WORK IN DAIRYING, BY M. S. KARNITSKAYA [1]
237 P. ILLUS., DIAGRS., TABLES.

AT HEAD OF TITLE: UCHEBNIKI I UCHEBNIYE POSOBIA DLYA BYSSHIKH SEL'SKOKHOZ-
YAYSTVENNYKH UCHEBNIKH ZAVEDENIY.

KARNITSKAYA, N.V.

Characteristics of local whooping cough strains. Zhur.mikrobiol.
epid.i immun. no.8:88 Ag '54. (MLRA 7:9)

1. Iz Rostovskogo-na Donu instituta epidemiologii, mikrobiologii
i g^{ig}iyeny.
(HEMOPHILUS PERTUSSIS)

REZNIKOVA, O.Yu; SOBOLEVA, Ye.S.; KARNITSKAYA, N.V.; TRUSEVICH, A.I.

Prevention of seasonal catarrhs with an ekmolin and penicillin mixture. Zhur.mikrobiol. epid.i immun. no.7:48 J1. '55.(MLRA 8:10)

1. Iz Rostovskogo-na-Donu instituta epidemiologii, mikrobiologii i gigiyeny dir. Ye.S.Sobeleva, i Rostovskoy gorodskoy sanitarno-epidemiologicheskoy stantsii; glavnyy vrach G.A.TSaturova.

(COMMON COLD, prevention and control,
antibiotic ekmoline with penicillin)

(ANTIBIOTICS, therapeutic use,
ekmoline, prev. of common cold, with penicillin)

(PENICILLIN, therapeutic use,
common, cold, prev.,with antibiotic ekmoline)

KARNITSKAYA

USSR/Chemical Technology - Chemical Products and Their Application. Food Industry,
I-28

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 63722

Author: Karnitskaya, N. V., Firsova, V. I., Makashev, A. P., Aldakimova, A. Ya.

Institution: None

Title: Action of Carbon Dioxide on Botulism Microbe in Fish Processed by Hot Smoking

Original
Periodical: Vopr. pitaniya, 1956,¹⁵ No 2, 49-50

Abstract: Study of the effects of storage of fish, that has been hot-smoked, in an atmosphere of CO₂ (70-90%) on toxin formation by B. botulinus, the spores of which are found in the intestines of some fish under natural conditions. It was found that hot-smoked fish of small and medium size is preserved in CO₂ in good condition (according to organoleptic characteristics) for 15 days as compared with 2-3 days of the controls. Storage of fish in an atmosphere of CO₂ neither inhibits nor stimulates germination of spores and toxin production of B. botulinus.

Card 1/1 *G-U-Sci Res. Inst. • Fish Ind. & Oceanography, Boston, Mass.*

GORDIYENKO, A.N.; TSYNKALOVSKIY, R.B.; SAAKOV, B.A.; KARNITSKAYA, N.V.

Effects of the duration of antigen contact with skin receptors on antibody formation. Biul.sksp.biol.med. 42 no.6:56-58 Je '56.

(MLRA 9:9)

1. Iz kafedry patofiziologii (zav. - prof. A.N.Gordiyenko) Rostovskogo meditsinskogo instituta. Predstavlena akademikom A.D.Speranskim.

(IMMUNITY

antibody form., eff. of duration of antigen contact with skin receptors)

(CENTRAL NERVOUS SYSTEM, physiol.

eff. of duration of antigen contact with skin receptors on antibody form.)

KARNITSKAYA, N. V., Cand Med Sci -- (diss) "On participation of the reflex component ~~in~~ in the process of antibody formation." Rostov-on-Don, 1957. 20 pp (Rostov State Med Inst), 200 copies (KL, 52-57, 111)

- 116 -

KARNITSKAYA, N.V.

Use of radioactive indicators in microbiological in microbiological
investigations. Zhur, mikrobiol. epid. i immun. 30 no.8:39-45 Ag '59.
(MIRA 12:11)

1. Iz Rostovskogo-na-Donu instituta epidemiologii, mikrobiologii
i gigyery.

(MICROBIOLOGY)
(RADIOISOTOPES)

BALANDIN, I.G.; KARNITSKAYA, N.V.

Urease activity of diphtheria and pseudodiphtheria bacteria.
Zhur. mikrobiol. epid. i immun. 31 no. 10:17-20 0 '60.

(MIRA 13:12)

1. Iz Rostovskogo meditsinskogo instituta i Rostovskogo instituta
epidemiologii, mikrobiologii i gigiyeny.
(CORYNEBACTERIUM) (UREASE)

KARNITSKAYA, N.V.

Study of staphylococcal toxin formation by the method of diffusion precipitation in comparison with pathogenic signs. Zhur.mikrobiol., epid. i imun. 33 no.3:33-35 Mr '62. (MIRA 15:4)

1. Iz Rostovskogo-na-Donu instituta epidemiologii, mikrobiologii i giginieny.

(STAPHYLOCOCCUS) (TOXINS AND ANTITOXINS)

MARISOVA, A.P.; KARNITSKAYA, N.V.; KONDRATENKO, V.I.; VOLCHANSKAYA, M.A.;
PRIYMA, N.I.; SHOVRUN, A.G.; MOSKALENKO, Ye.P.; MUZYKOVA, N.F.;
EL'KIND, R.A.

Study of the reactogenic properties and epidemiological effectiveness
of the whooping cough-diphtheria vaccine in Rostov-on-Don. Zhur.
mikrobiol., epid. i immun. 32 no.12:8-12 D '61. (MIRA 15:11)

1. Iz Rostovskogo instituta epidemiologii, mikrobiologii i gigiyeny.
(~~ROSTOV-ON-DON--WHOOPING COUGH--PREVENTIVE INOCUALTION~~)
(~~ROSTOV-ON-DON--DIPHTHERIA--PREVENTIVE INOCULATION~~)

NIKONOV, A.G. [deceased]; GORIYENKO, I.I.; KARNITSKAYA, N.V.; GOL'DBERG,
M.S.; MANDROVSKAYA, V.D.

Coli-Protus bacteriophage in experimental conditions in vivo. Report
No. 1. Zhur. mikrobiol., epid. i immun. 40 no. 8:82-85 Ag '63.
(MIRA 17:9)

1. Iz Rostovskogo instituta epidemiologii, mikrobiologii i gigiyeny.

L 10979-46 EWT(1)/EWA(1)/EWA(b)-2 JK

ACC NR: AP5028394

SOURCE CODE: UR/0016/65/000/009/0066/0070

AUTHOR: Karnitskaya, N. V. 44/55

ORG: Rostov-on-Don Institute of Epidemiology, Microbiology, and Hygiene (Rostovskiy-na-Donu institut epidemiologii, mikrobiologii i gigiyeny) 44/55 29 B

TITLE: Toxin formation in pathogenic staphylococci 44/55

SOURCE: Zhurnal mikrobiologii, epidemiologii i immunobiologii, no. 9, 1965, 66-70

TOPIC TAGS: toxicology, microbiology

ABSTRACT: The frequency of toxin formation in pathogenic staphylococci strains is discussed in connection with the controversial data in the literature. The author used the diffuse agar precipitation method to study 959 cultures of pathogenic staphylococci. This method elicited a high percentage (98.3%) of toxin-forming cultures among the strains isolated from pathological material and a somewhat less percentage among the strains isolated from clinically healthy persons. A high degree of correlation was noted between toxin formation and other signs of strain pathogenicity. A comparison was made between the effectiveness of detecting toxin formation in liquid and solid media. In some instances the amount of antigenic substrates in the filtrates of pathogenic staphylococci broth cultures were so low that it could be demonstrated immunochemically and by biological tests only after concentration in precipitates (salting out with ammonium sulfate, centrifugation). Diffuse precipitation in plates is more sensitive, according to the author's data, for eliciting toxin formation in pathogenic

Card 1/2

UDC: 576.851.252.097.29

L 10979-46

ACC NR: AP5028394

staphylococci than the method of demonstrating toxins in liquid media. Orig. art. has: ⁶
3 tables.

SUB CODE: 06 / SUBM DATE: 10Jun64 / ORIG REF: 008 / OTH REF: 015

Card ¹2/2

KRAMITSKIĬ, I. N.

Elementy uchebnaia o mirozdanii v kurse fiziki s-miletnei shkoly [Elements of the theory of the universe in physics course of seven-year schools]. Moskva, Uchpedgiz, 1953. 80 p.

SO: Monthly List of Russian Accessions, Vol. 6 No. 12 March 1954.

KARNITSKIY, P.N.

Training of those who have completed the seven year school in the
field of mathematical geography. Geog. v shkole 18 no.2:45-47
Mf-Ap '55. (MIRA 8:7)
(Geography, Mathematical--Study and teaching)

KARNITSKIY, P.N.

Observations of the sun and the polestar in the fifth class.
Geog. v shkole 19 no.4:40-46 J1-Ag '56. (MLRA 9:10)
(Polestar) (Sun)

KARNITSKIY, P.N.

Problems in cosmology and antireligious training in geography
classwork. Geog. v shkole 21 no.3:42-47 My-Je '58. (MIRA 11:6)
(Cosmology) (Atheism)
(Geography--Study and teaching)

KARNITSKIY, P.N.; SIDOROVA, L.A., red.; GOLOVKO, B.N., tekhn.red.

[Problems of cosmography in mathematical problems for
secondary schools; manual for teachers] Voprosy o Vselennoi
v matematicheskikh zadachakh srednei shkoly; posobie dlia
uchitelei. Moskva, Gos.uchebno-pedagog.izd-vo M-va prosv.
RSFSR, 1959. 65 p. (MIRA 13:5)
(Cosmography) (Mathematics--Problems, exercises, etc.)

KARNITSKIY, P.N. (Fyazan')

New proof of the sphericity of the earth and its daily revolution.
Geog.v shkole 24 no.6:43-44 N-D '61. (MIRA 14:10)
(Earth--Rotation)

KARNITSKIY, P.N. (Ryazan')

School evenings dedicated to the successes of the U.S.S.R. in
conquering space. Fiz. v shkole 22 no.2:54-56 Mr-Ap '62.
(MIRA 15:11)

(Astronautics)

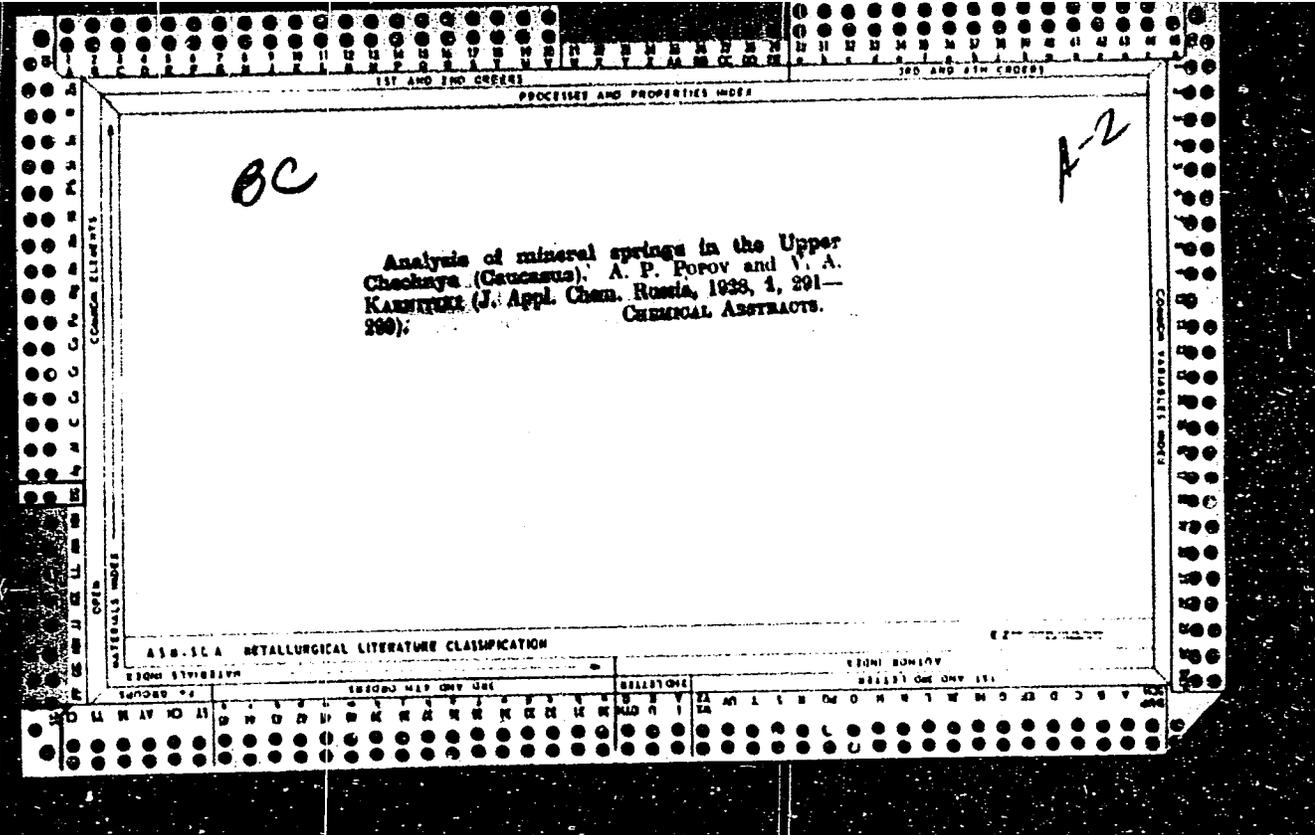
KARNITSKIY, P.M. (Ryazan')

Achievements in the study of the cosmos and the atheistic
education of students. Geog. v. shkole 26 no.2:42-46 Mr-Ap '63.

(Astronautics) (Religion)
(Geography—Study and teaching)

KARNITSKIY, Pavel Nikolayevich; SIDONOVA, L.A., red.; MAKAROVA,
N.F., tekhn. red.

[Problems about the universe in mathematics in secondary
schools] Voprosy o vselennoi v matematicheskikh zadachakh
srednei shkoly; posobie dlia uchitelei. Izd.2., dop. Mo-
skva, Uchpedgiz, 1963. 90 p. (MIRA 17:2)



1ST AND 2ND ORDERS
3RD AND 4TH ORDERS

PROCESS AND PROPERTIES INDEX

B-I-5

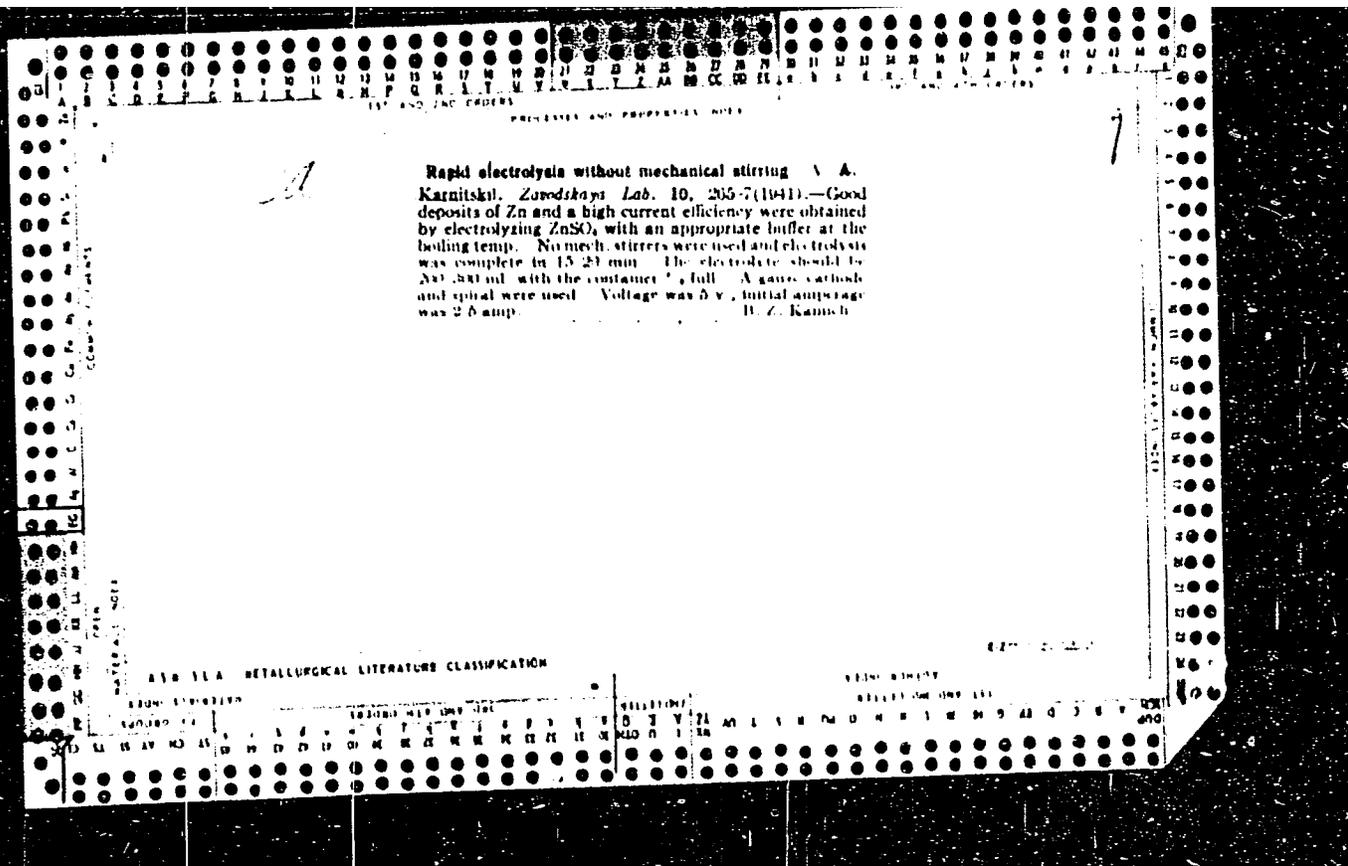
BC

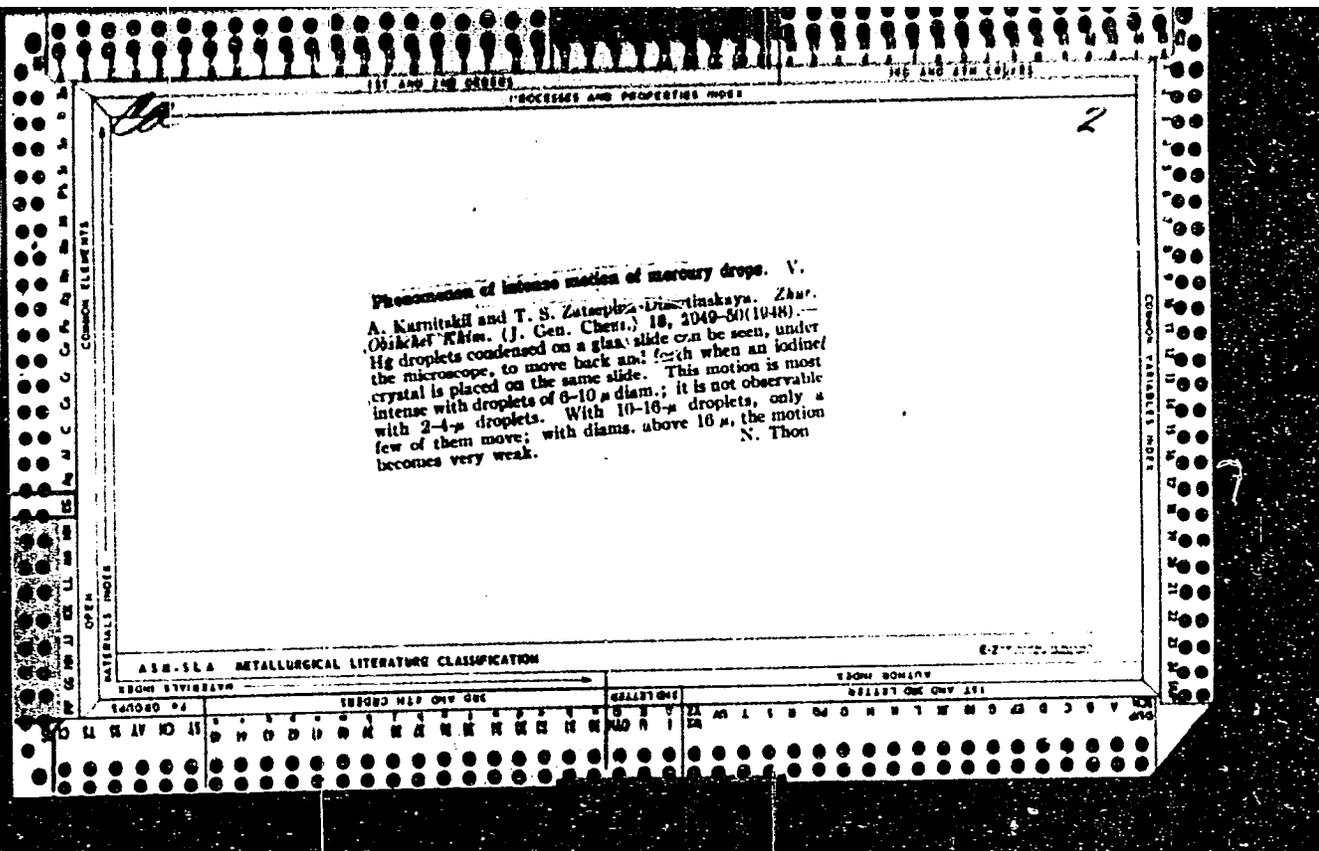
Corrosion of technical iron by acids in presence of sulphur dioxide and hydrogen sulphide. V. A. KARNITSKI and N. A. GOLITSKY (J. Appl. Chem. Russ., 1935, 8, 634-671; cf. B, 1935, 633).—Augmented corrosion of Fe containers by HCl or H₂SO₄ in presence of SO₂ or H₂S is ascribed to local currents arising from FeS-Fe couples on the metal surface. In the case of H₂SO₄, the max. corrosive action of H₂S or SO₂ is found in 30% acid. R. T.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS
3RD AND 4TH ORDERS

1ST AND 2ND ORDERS
3RD AND 4TH ORDERS





KARNITSKIY, V. A.,

V. A. Karnitskii and T. S. Zatssepina-Dizertinskaia, The appearance of intensive movement of mercury globules on uncovered mercury by microanalytical examination. p.2049.

We recommend this qualitative chemical reaction especially as being the most vivid, for proving the presence of traces of mercury in objects.

Chair of General Chemistry
Rostov State Medical
Institute.
June 15, 1947

SO: Journal of General Chemistry (USSR) 21, (80) No. 12, (1947)

KARNITSKIY, V. A.

USSR/ Analytical Chemistry - General Questions

G-1

Abs Jour ; Referat Zhur - Khimiya, No 4, 1957, 12006

Author : Karnitskiy V.A.

Title : Effect of Temperature on Rate of Electroanalysis

Orig Pub : Zh. analit. khimii, 1956, 11, No 4, 447-452

Abstract : Experiments on electrolysis of salts were conducted with the use of a Pt plate as cathode and of a Pt-spiral anode, with constant voltage at the electrodes, or, more frequently, with a constant polarization of the cathode; as electrolyte were used pure solutions of salts and solutions of the same salts containing different additions that maintain a definite pH value. Rate of electrodeposition depends on the temperature. Equations are given, which express the dependence of electrodeposition rate on the temperature under condition of occurrence of the same electrode process. Optimal temperature for acceleration of the

Card 1/2

Loston Med Inst.

KAPITSKY, V. I.

KAPITSKY, V. I. -- "Investigation of Gasser's Ganglion and the Upper Cervical Sympathetic Ganglion in Certain Infections in Man." *USSR Health Research*. Moscow Medical Stomatological Inst. Moscow, 1955. (Dissertation for the Degree of Candidate in Medical Sciences)

SO: *Knizhnaya Loteriya*, No 1, 1990

KARNITSKIY, V.I.; KACHENOVSKIY, A.N. (Moskva)

Glossalgia. Fel'd. i akush. 24 no.7:12-13 Ji '59.

(MIRA 12:10)

(TONGUE--DISEASES)

KARNITSKIY, V.I., kand.med.nauk; KRITSKIY, A.A.

Rare case of irregular development of the teeth. Stomatologia
38 no.3:73 My-Je '59. (MIRA 12:8)

1. Iz kafedry terapevticheskoy stomatologii (zav. - prof.Ye.Ye.
Platonov) i kafedry rentgenologii i radiologii (zav. - prof.I.A.
Shelkter) Moskovskogo meditsinskogo stomatologicheskogo instituta
(dir. - dotsent G.N.Beletskiy).

(TEETH--ABNORMITIES AND DEFORMITIES)

KARNITSKIY, V.I., assistant; KACHENOVSKIY, A.N., ordinator; SHORIN, V.D.,
assistant

Comparison of methods for preparing hard dental tissue. Stomatologia
39 no.1:13-14 Ja-F '60. (MIRA 14:11)

1. Iz kafedry terapevticheskoy stomatologii (zav. - prof. Ye.Ye.
Platonov) i kafedry ortopedicheskoy stomatologii (zav. - prof.
V.Yu.Kurlyandskiy) Moskovskogo meditsinskogo stomatologicheskogo
instituta (dir. - dotsent G.N.Beletskiy).
(DENTAL INSTRUMENTS AND APPARATUS)

KARNITSKIY, V.I., dotsent

Histochemical study of phosphatases in human teeth with caries.
Stomatologiya 42 no.2:17-18 Mr-Apr'63 (MIRA 17:3)

1. Iz kafedry terapevticheskoy stomatologii (zaveduyushchiy -
prof. Ye.Ye.Platonov) Moskovskogo meditsinskogo stomatologicheskogo
instituta i kafedry terapevticheskoy stomatologii (zaveduyushchiy
dotsent V.I.Karnitskiy) Omskogo meditsinskogo instituta.

MOISEYCHIK, A.N.; KARNITSKIY, V.V.

Investigation and adjustment of starting characteristics of the
M₆MZ-965 engine. Avt.prom. 28 no.5:1-4 My '62. (MIRA 15:5)

1. Gosudarstvennyy soyuznyy ordena Trudovogo Krasnogo Znameni
nauchno-issledovatel'skiy avtomobil'nyy i avtomotorny institut.
(Automobiles--Engines--Testing)

L 35603-65 EWT(d)/EWT(m)/EWT(f)/EPR/T-2/EWA(c) s/0286/65/000/002/0073/0073
ACCESSION NR: AP5004966

AUTHORS: Karitskiy, V. V.; Minkin, M. D.; Lozar', A. S.; Shaydorov, P. L.; Petrova, S. ¹⁹
~~S. M. G.~~ ¹⁷ B

TITLE: Device for starting internal combustion engines at low temperatures.
Class 46, No 167704

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 2, 1965, 73

TOPIC TAGS: ignition system

ABSTRACT: This Author Certificate describes a device for starting an internal combustion engine (example: Y-block diesel). The device has space for an easy-to-ignite starter liquid which is fed to an intake track. A mixer receives the intake emulsion, and a compressed air supply turns the liquid into a spray. The mixer is multichanneled so that the emulsion flows to one or a group of sprayers. This ensures transmission of the emulsion to any or all cylinders of the engine block. The device is shown in Fig. 1 on the Enclosure. Orig. art. has: 1 figure.

Card 1/3

L 35603-65

ACCESSION NR: AP5004966

ASSOCIATION: Tsentral'nyy ordena trudovogo krasnogo znameni nauchno-
issledovatel'skiy avtomobil'nyy i avtomotornyy institut (Central Order of the
Trudovoye Krasnoye Znamenye Scientific Research Automobile and Automotive
Institute)

SUBMITTED: 24 Dec 62

ENCL: 01

SUB CODE: PR

NO REF SOV: 000

OTHER: 000

Card 2/3

L 05110-07 04110/7 00110/00
ACC NR: AP6006514 (A) SOURCE CODE: UR/0113/65/000/011/0012/0014

AUTHOR: Karnitskiy, V. V.; Minkin, M. L. (Candidate of technical sciences)

ORG: NAMI

TITLE: Starting cold engines by using highly flammable liquids

SOURCE: Avtomobil'naya promyshlennost', no. 11, 1965, 12-14

TOPIC TAGS: motor vehicle, engine reliability, engine starter system, engine ignition system, diethyl ether, *FUEL COMPOSITION, FLAMMABILITY*

ABSTRACT: The authors discuss various liquids and their respective injection systems for introducing them into engines before starting. American, French and English starting aids are discussed. A test was set up to determine the effect of diethyl ether content in the starting mixture on starting time, using the SMD diesel at -10°C. The results show that a diethyl ether content of 40% and less is effective at -20 to -25°C. On the basis of these data all other control starting was carried out with a 60% diethyl ether content in the starting mixture. A starting mixture was developed at the Central "Order of the Red Banner of Labor" Scientific Research Institute of Automobiles and Automobile Engines for diesels with the following composition: 65% diethyl ether, 12% light mineral oil, 20% petroleum ether, 3% aldehydes and 0.2% antioxidant. This mixture ensured diesel starting down to -40°C with smooth engine

Card 1/2

UDC: 621.431.73:62-57

1. 5713-47

ACC NR: AP6006514

operation. The NAMI-5PP-40 and NAMI-6PP-40 starting attachments were produced as the result of a series of tests carried out on diesel and carburetor engines. These starting attachments can be used both for diesel and carburetor engines up to 40 liters. They spray the starting mixture into the intake manifold instead of spraying it directly into the cylinder. This is more economical than the latter. A diagram is given for one of these starting attachments. It differs from the French "Start-pilot" in that it has many more channels and ensures a uniform distribution of the starting emulsion to each individual injector or valve. An empirical formula is presented which describes the relationship between engine displacement capacity, design characteristics, ambient temperature and the minimum amount of starting mixture necessary for starting the engine at a given temperature. The starting mixture and attachments were tested under arctic conditions and proved successful. Orig. art. has: 3 figures, 3 tables, 1 formula.

SUB CODE: 21,13/ SUBM DATE: None

Card 2/2 *su*

L 06541-67 EWT(m) DJ

ACC NR: AP6019754 (A) SOURCE CODE: UR/0113/66/000/006/0004/0006

AUTHOR: Mikulin, Yu. V. (Candidate of technical sciences); Smirnov, M. S. (Candidate of technical sciences); Lozar', A. S.; Petrova, S. V.; Karnitskiy, V. V.

ORG: none

TITLE: Possibility of decreasing diesel starting wear during the winter

SOURCE: Avtomobil'naya promyshlennost', no. 6, 1966, 4-6

TOPIC TAGS: diesel engine, lubricant, lubricant additive, diesel fuel, lubricating oil, ENGINE STARTER SYSTEM, ENGINE PERFORMANCE CHARACTERISTIC

ABSTRACT: Diesel-engine wear during low-temperature starts is analyzed, and a table is presented listing various Soviet cities, their average temperatures, and the wear on cylinder sleeves during the year at these temperatures. All of the experiments were conducted using a ZD-6, a 6-cylinder, 4-cycle diesel engine with direct fuel injection; the engine develops 150 hp at 1500 rpm. Starting wear on a diesel engine in summer and winter demonstrated the expediency of using a special starting fluid and low-viscosity, thickened oils for cold starts. Cold starting of the engine significantly facilitates diesel operation at low temperatures and does not increase normal wear. For cold starts in winter, a special starting fluid based on DA GOST 4749-49 arctic diesel fuel and low-viscosity, thickened MT-14p oil, diluted with 15% diesel fuel, are recommended. In summer, DL GOST 4749-49 fuel and MS-20 with a 3%

56
55
B

Card 1/2

UDC: 621.431.73:620.178

L 06541-67

ACC NR: AP6019754

admixture of TslATIM-339¹¹ are recommended. The greatest wear is during the first few minutes of operation; in areas with below zero average temperatures, it will be above 15 μ and in the areas with above zero average temperatures it will be below 15 μ .
Orig. art. has: 5 figures and 1 table. [WH]

SUB CODE: 21 / SUBM DATE: none/ ORIG REF: 004/ OTH REF: 001

Card 212 *esj*

KARNKOWSKA-GORSKA, Z.

Incorporation of tritium labelled thymidine into the spinning glands
of the silk worm *Bombyx mori* L. *Bul Ac Pol biol* 8 no.8:353-356 '60.
(EEAI 10:3)

1. Department of cytology, Warsaw University. Presented by
W.Gajewski.

(TRITIUM)
(SILKWORMS)
(THYMIDINE)

KARNKOWSKI, P.

"Postcrystalline deformations in the Middle Carpathian Mountains," Przegląd Geologiczny, Warszawa, No 9, Sept. 1954, p. 381.

SO: Eastern European Accessions List, Vol 3, No 11, Nov 1954, L.C.

KARNKOWSKI, P.

TECHNOLOGY

PERIODICAL: PREZGLAD GEOLOGICZNY. Vol. 6, no. 3, Mar. 1953.

KARNKOWSKI, P. The Paleocene of the Magura Nappe. p. 129.

Monthly List of East European Accessions (EEAI) LC Vol. 3, no. 4
April 1959, Unclass.

KARNKOWSKI, P.

TECHNOLOGY

PERIODICAL: PRZEGLAD GEOLOGICZNY. Vol. 6, no. 11, Nov. 1953.

KARNKOWSKI, P. From a visit in the Rumanian Carpathians. p. 499.

Monthly List of East European Accessions (EEA) LC Vol. 8, no. 4
April 1959, Unclass.

HARNIUMSKI, P. ; JURKIEWICZ, H.

Some results of petroleum prospecting in the Carpathian foreland in the years of 1955-1959. p. 422.

PRZEGLAD GEOLOGICZNY. (Wydawnictwa Geologiczne) Warszawa. Poland.
Vol. 7, no. 9, Sept. 1959.

Monthly List of East European Accessions (MEEA) LC, vol. 9, no. 2, Feb. 1969.

Incl.

Karnkowski, P.; Jurkiewicz, H.

The age of the Inoceramus layer of the Magura Nappe. p. 17.

ACTA GEOLOGICA POLONICA. (Polska Akademia Nauk. Komitet Geologiczny) Warszawa,
Poland, Vol. 9, no. 1, 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 8, August 1959.
Uncla.

KARNKOWSKI, Piotr

The origin of crude oil and the formation of deposits. Wiad neft 6
no.6:121-125 Je '60. (EEAI 9:10)
(Petroleum)

KARNKOWSKI, Piotr; GLOWACKI, Eugeniusz

Geological structure of sub-Miocene formations in the middle Carpathian foreland. *Kwartalnik geol* 5 no.2:372-419 '61.

1. Zakład Geologiczno-Wiertniczy P.N. w Jasle.

KARNKOWSKI, Piotr

Problems of oil prospecting in the Carpathian Flysch and in the
fore-Carpathian region. Wlad naft 7 no.1:1-5 Ja '61. (EEAI 10:5)
(Poland--Petroleum) (Carpathian Mountains)

KARINKOWSKI, Piotr

Remarks on the oil and natural gas contents of the Polish Flysh Carpathians and their submontane region. Przegl geolcg 10 no.7:333-338 J1 '62.

1. Przedsiębiorstwo Poszukiwan Naftowych, Jaslo.

KARNKOWSKI, Piotr, mgr.

A contribution to the problem of the oil bearing of the Polish Flysh Carpathian Mountains and their foreland. Nafta Pol 18 no.6:152-155 Je '62.

1. Przedsiębiorstwo Państwowe Poszukiwan Nafty, Krosno.

KARNKOWSKI, Piotr _____

Types of petroleum deposits in the Carpathian Mountains
and the period of their formation. Wlad naft 8 no.9:193-197
S '62.

KARNKOWSKI, Piotr

Synclorium territories as new prospective regions in the
Flysch Carpathian Mountains. Wiad naft 8 no.10:219-220
0 '62.

KARNKOWSKI, Piotr, mgr

From the petroleum geology of Czechoslovakia. Nafta Pol 18 no.11:
309-311 N '62.

1. Zjednoczenie Przemyslu Naftowego, Warszawa.